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| APPLICATION NO. | FILING DATE | | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. | | |
|-----------------|-----------------------|------------|----------------------|---------------------|------------------|--|--|
| 09/941,179 | 09/941,179 08/27/2001 | | Martin Adamczewski | Mo-6580/LeA 34,821 | 7071 | | |
| 34469 | 7590 | 06/29/2004 | EXAMINER | | | | |
| BAYER C | ROPSCIE | ENCE LP | PAK, MICHAEL D | | | | |
| Patent Depar | | | ART UNIT | PAPER NUMBER | | | |
| PITTSBURG | GH, PA | 15205-9741 | 1646 | | | | |
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DATE MAILED: 06/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| • | | | Application No. | | Applicant(s) | | | | | |
|---|---|-------------------|----------------------|---|--------------|----------|--|--|--|--|
| | | | 09/941,179 | | ADAMCZEWSKI | ET AL. | | | | |
| | Office Action Summary | | Examiner | | Art Unit | | | | | |
| | | | Michael Pak | | 1646 | | | | | |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply | | | | | | | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). | | | | | | | | | | |
| Status | | | | | | | | | | |
| 1) | Responsive to communication(s) file | d on <u>8/27/</u> | 2001 | | | | | | | |
| 2a) <u></u> □ | | | action is non-final. | | | | | | | |
| 3)[| Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. | | | | | | | | | |
| Disposition of Claims | | | | | | | | | | |
| 4) ⊠ Claim(s) <u>1-32</u> is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) □ Claim(s) is/are allowed. 6) □ Claim(s) is/are rejected. 7) □ Claim(s) is/are objected to. 8) ⊠ Claim(s) <u>1-32</u> are subject to restriction and/or election requirement. | | | | | | | | | | |
| Applicati | on Papers | | | | | | | | | |
| 9)[| The specification is objected to by the | Examiner | | | | <i>,</i> | | | | |
| 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. | | | | | | | | | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | | | | | | |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. | | | | | | | | | | |
| Priority under 35 U.S.C. § 119 | | | | | | | | | | |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. | | | | | | | | | | |
| Attachmen | t(e) | | | | | | | | | |
| 1) Notice 2) Notice 3) Inform | te of References Cited (PTO-892) se of Draftsperson's Patent Drawing Review (PT mation Disclosure Statement(s) (PTO-1449 or F r No(s)/Mail Date | | Pape 5) Notic | view Summary (er No(s)/Mail Dat ce of Informal Pa er: | | O-152) | | | | |

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DETAILED ACTION

1. Claims 1-32 are pending in the instant application.

Election/Restrictions

- 2. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - Claims 1-20 and 23-32, drawn to a modified acetylcholine receptor subunit, and an acetylcholine receptor comprising said modified subunit, and nucleic acids, DNA constructs, vectors, and host cells encoding said subunit, and methods of producing the receptor, classified in class 530, subclass 350, class 536, subclass 23.5 and class 435, subclass 69.1, 320.1 and 252.3.
 - II. Claim 21, in so far as it is drawn to preparing a nucleic acid encoding a modified receptor <u>by chemical synthesis</u>, classified in class 536, subclass 25.3.
 - III. Claim 21, in so far as it is drawn to preparing a nucleic acid encoding a modified receptor by amplifying the nucleic acid by PCR, classified in class 435, subclass 91.2.
 - IV. Claim 22, drawn to a method for detecting altered conduction properties of acetylcholine receptors, classified in class 435, subclass 7.1.
- 3. The inventions are distinct, each from the other because of the following reasons:

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Invention I is related to each of inventions II and III as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the nucleic acids of invention I can be made by either amplifying the nucleic acid by PCR or by chemical synthesis, which are materially different processes.

Inventions I and IV are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the modified acetylcholine receptor can be used in a method of detecting altered conduction properties of acetylcholine receptors, but it can also be used in a method of generating antibodies, which is a materially different method.

Inventions II, III, and IV are unrelated to each other. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the inventions are different inventions because even though they involve common elements such as a modified receptor subunit, a receptor comprising said subunit, or a nucleic acid encoding said subunit, the methods

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of the different inventions require different starting compounds, and have different method steps and/or goals.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification and/or separate search requirements, restriction for examination purposes as indicated is proper.

Election of species:

- 4. In addition to the above restriction requirement, a further election of species is required as follows:
- a) Applicant must elect one of the following patentably distinct species of vertebrate acetylcholine receptor $\underline{\alpha}$ subunit in the claimed invention: mouse, rat, chicken, zebra fish, rhesus monkey, bovine, or porcine.
- b) Applicant must also elect one of the following patentably distinct species of insect acetylcholine receptor $\underline{\alpha}$ subunit in the claimed invention: $\alpha 2$ subunit of Myzus persicae, $\alpha 3$ subunit of Myzus persicae, $\alpha 1$ subunit of Heliothis verscens, $\alpha 1$ subunit of Manduca sexta, $\alpha 1$ subunit of Drosophila melanogaster, $\alpha 1$ subunit of Drosophila melanogaster.
- c) Applicant must also elect one of the following patentably distinct species of $\underline{\text{vertebrate}}$ acetylcholine receptor $\underline{\beta}$ subunit as follows: mouse, rat, chicken, zebra fish, rhesus monkey, bovine, or porcine.

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Each subunit is considered to constitute a patentably distinct species because they have separate structures, and require separate searches. Search of more than a single species would constitute a burden on the Office.

Applicant is required under 35 U.S.C 121 to elect one of each of the following: a) a single vertebrate α subunit species, b) a single insect α subunit species, and c) a single vertebrate β subunit species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, claims 1-4, 8, 10-12, 14-23, and 25 are generic.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered non-responsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentable distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C 103(a) of the other invention.

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Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Rejoinder under Ochiai/Brouwer

The examiner has required restriction between product and process claims. Where applicant elects claims directed to the product, and a product claim is subsequently found allowable, withdrawn process claims that depend from or otherwise include all the limitations of the allowable product claim will be rejoined in accordance with the provisions of MPEP § 821.04. Process claims that depend from or otherwise include all the limitations of the patentable product will be entered as a matter of right if the amendment is presented prior to final rejection or allowance, whichever is earlier. Amendments submitted after final rejection are governed by 37 CFR 1.116; amendments submitted after allowance are governed by 37 CFR 1.312. In the event of rejoinder, the requirement for restriction between the product claims and the rejoined process claims will be withdrawn, and the rejoined process claims will be fully examined for patentability in accordance with 37 CFR 1.104. Thus, to be allowable, the rejoined claims must meet all criteria for patentability including the requirements of 35 U.S.C. 101, 102, 103, and 112. Until an elected product claim is found allowable, an otherwise proper restriction requirement between product claims and process claims may be maintained. Withdrawn process claims that are not commensurate in scope with an allowed product claim will not be rejoined. See "Guidance on Treatment of Product and Process Claims in light of In re Ochiai, In re Brouwer and 35 U.S.C. § 103(b)," 1184

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O.G. 86 (March 26, 1996). Additionally, in order to retain the right to rejoinder in accordance with the above policy, Applicant is advised that the process claims should be amended during prosecution either to maintain dependency on the product claims or to otherwise include the limitations of the product claims. **Failure to do so may result in a loss of the right to rejoinder.**

Further, note that the prohibition against double patenting rejections of 35 U.S.C. 121 does not apply where the restriction requirement is withdrawn by the examiner before the patent issues. See MPEP § 804.01.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Pak whose telephone number is 571-272-0879. The examiner can normally be reached on M-F 8:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary L Kunz can be reached on 571-272-0887. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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